



# The Role of Information and Communications Technologies in the African Development Agenda<sup>1</sup>

## Introduction

I want to thank the African Training and Research Centre in Administration for Development (CAFRAD), especially its esteemed Director General, Professor Tijani Muhammed Bande, the UN Department of Economic and Social Affairs, Division for Public Economics and Public Administration, the Ministry of Public Service and Administration of the Government of South Africa, and the NEPAD Secretariat for the invitation to exchange some ideas on Africa's Development Agenda, and the role that information and communications technologies can play in advancing, or for that matter, in stalling that process.

## The Role of ICTs in Africa's Development Agenda

### Context

When we contemplate Africa's development agenda, we are compelled to take quick stock of our present condition. In this regard, it is hardly rocket science to say that the African condition does not reflect the slightest proportion of its potential, even given the debilitation of our jaundiced colonial history, and our legacy of internecine conflicts and distractions. What is perhaps worthy of note is the fact, not too often discussed, that we need not be where we are today, given who we are, what we have, what we know and what we can do as an endowed, gifted, talented and eminently humane people.

### Development as Problem Solving

Development is essentially problem solving. The degree to which we develop is directly related to the extent to which we take command and ownership of our problems, grasp them in their complexity, build bold strategies to overcome them, and in the process, create insights, innovations and new capacities which propel us to new heights of engagement with nature, and the challenges of the pursuit of a meaningful, inspired and enlightened existence; in other words, to a new level of problem solving.

### Africa's Problems

I must first distinguish between what our problems truly are, and what others say our problems are. The first enables us to solve them, the second compels us to risk wasting our limited resources responding to insights that could seriously lack truth or efficacy or, if they have relevance, could seriously serve to mis-direct our focus and efforts to peripheral problems, which mask our more serious and more fundamental challenges.

I should also state that in talking about Africa's problems, I do not seek to lend value for a split second to the chorus of relentless castigation

of all Africa is or does. Such irresponsible arrogance and ignorance have served no purpose except to undermine our self-confidence, make us doubt our view of ourselves and of the world, and compel us to abandon our legitimate right to own our problems and enjoy the enrichment that comes with solving them.

What then is really Africa's problem? What is wrong? What is missing? What are we not getting right? Why? These are all critical questions any group of people must address in order to build a vision for development against which to create an agenda with which to accomplish it. These are tough questions, the analysis of which might be painful, even frightening, threatening to pull the veil of survival from our covered faces. But history has never devised any means of solving critical human questions without confronting sometimes painful and harsh realities in the process of solving them.

Our basic problem is that we do not allow ourselves the profound experience of taking ownership of our problems and settling down to deal with them with relentless focus, commitment, confidence, hope and exhilaration. For much of our recent history, the world has taken over Africa's problems and often left us with nothing creative to do but watch our destiny float in the air like a listless balloon, blown in the wind until it drifts over the horizon, destined for nowhere. Not only that, the world has taken over our right of ownership of our problems, our right and responsibility to solve them, and our right to the innovation, creativity and self-actualisation that come out of a committed, passionate and indefatigable confrontation with our problems, with the promise of joy and exhilaration when we overcome them and move on to tackle the next set of problems. This is the fundamental dynamics of nation-building. This is the basis of the development of most of the countries of the industrial world, which we find ourselves incessantly being pushed to use as the yardstick for building our own societies. Africa has got to be the only continent in the world where many seek to dictate our development goals, while we play second-fiddle to some who may never have known what it is to wake up to the mystery of the African dawn.<sup>2</sup>

## Requiem to Private Dialogue

One of the liabilities of information and communications technology is that we can no longer hold private conversations on issues of pressing common interest. The kind of dialogue I would like us to have this morning is the type that our ancestors used to be able to have, under the old baobab tree, far away from the ears of those whose presence might constitute a potential embarrassment, thus limiting our freedom to deal with our concerns with absolute candour and vigour. The mass media, combined with the blinding spotlight on Africa and her problems, shuts out our ability to engage in sober reflection, the type which is not only enlightening, but enriching, enabling and empowering.

But given the fact of the loss of privacy conducive to sober self-analysis, something that we can do nothing about, we are left with two difficult choices: We go on engaging in pat conversations which, while preserving our image, allow our critical problems to fester; or we find the courage to address our critical problems, in private if we can, but publicly if we have no choice. Either way, our problems will only disappear if we boldly address them, so the only choice is to address them, whatever the audience, conceding nothing but the nominal courtesies of civilised behaviour to those who insist on abusing the privilege of overhearing us and speaking to us.

We must, therefore, in our present circumstances, choose to take ownership and command of our problem-solving process, otherwise called our development process, whatever the surrounding public, whoever is present. It is the compelling and quintessential first step in prosecuting our development process.

## The African Development Agenda

In this light, let us address the African Development Agenda and how we can use the facilitation of ICTs to prosecute it. Do we have an African Development Agenda? And if so, what is it?

## The Evolution of an Agenda

It is my humble opinion that there is a simple path to developing a common agenda. It requires that first we take stock of where we are, where we have been, how we got here, where we really want to go, how we get there, what we have to work with, and how we recognise our dreamland when we get there. This, to me, is a necessary scenario for a development agenda. First, there must be common dialogue from which we develop a popular vision. The matching up of our experience, our resources (human, intellectual, emotional, cultural, historical and material) and our commitment against the challenges of this vision is the creative process by which we define a common agenda.

## The Quintessence of Information and Communications Technologies

The tool for conducting such a mass process, the tool for engaging men and women, young and old, rich and poor, in crafting a common future on the wealth of culture and experience, positive and negative, the tool which enables us to express ourselves articulately in our own context, and for others to hear us some distance away, and for us to hear them too, is the fundamental element of information and communications culture. The enhancement of this process to give it speed and distant reach, to store it for future use, even far from its origin, the application of the innovation of science and technology to enable us conduct this critical dialogue faster, more widely and more frequently, this is the quintessence of information and communications technology or ICT.

Seen in this light, some might argue that we do not yet have a coherent African Development Agenda. The dialogue about our destiny has been more often than not conducted between our leaders and their international counterparts, not between them and us, on issues presumed to be important, not those we all know to be important because we know where it hurts. We live with our problems as much as we live with our dreams, and at the end of the day, we cannot be lulled to sleep

through time with the lullabies of distant voices while others live our lives for us, often with less expertise about us than we possess. If we do, we will wake up one day in the future, shocked by the humiliating fact that we have simply slept and snored through time and history, while not only the world but also our life itself passed us by.

### **Diagnostics of the New Partnership for Africa's Development (NEPAD)**

This is the context in which we must examine Africa's development agenda. Because, if we allow ourselves to critique our premier development agenda, the New Partnership for Africa's Development (or NEPAD), we see some of the elements of the trauma of our development dilemma.

I must emphasize that in diagnosing NEPAD, I do not wish to provide fodder for its external criticism, but instead, to commence the process of our reconstruction of it to regain ownership of it so that we can implement it as Africa's Vision for a Better Tomorrow. I would like us to boldly take it apart, examine it, re-design it, reconstruct it, and bring it out, strong, empowered, inspiring, commanding, and emboldened. For only an agenda with such attributes, an agenda deriving from the deepest passions and hopes of Africans themselves, an agenda built on the foundation of a common cause and a common vision, can drive the quantum development we so badly need to engage in, for both a better future as well as for the inspiration of the very process of self-development.

I also do not wish to leave the false impression of neglecting the protocol of courtesies due one's host, by discussing NEPAD's challenges in public. The problem is that we are in public, and we either speak to ourselves with candour and affection so that we can get our agenda right, or we refuse to engage in critical debate, and we abandon our destiny to those who have no compelling reason to risk our displeasure by engaging us in such disputation.

NEPAD is, today, Africa's Development Agenda. As such we have the obligation to examine it critically so that, should it have flaws, we can identify them, analyse them, and devise appropriate means of rectifying them. In this spirit, permit me to make two observations about NEPAD as they relate to the workings of Information and Communications Technologies.

At the beginning, we failed to get NEPAD right because we did not dialogue with the people. NEPAD, or its precursors, were developed *in camera*. Worse yet, NEPAD was developed in consultation with the rest of the world to the virtual exclusion of the vast majority of Africans who could not get a hold of even the preliminary documentation of the ideas feeding the process.

We also made a major symbolic error, twice over. In 2001, when it was still under a different name, the New Initiative for Africa, we presented Africa's vision to the G8 Summit in Genoa before it was presented to African leaders in Lusaka at the final OAU Summit. The next year, NEPAD was again presented in final form to the G8 Summit in Canada before it found its way to the Summit of the African Union in Durban. Minor, one might say, but in a process where African ownership was critical for enthusiastic support and buy-in, such *symbolic faux pas* have more debilitating impact than might appear on the surface.

### **The Importance of Popular Participation in the Creation of a Common Vision for Africa**

Just imagine a different scenario, one in which we used the basic facilitation of ICT—newspapers, radio and television—to discuss the idea of Africa's vision for the twenty-first century clear across this continent. Imagine that we printed millions of copies of the basic ideas, in as many African languages as we could, distributed them to schools, churches, civic organisations, companies, newspapers and more. Imagine if our leaders took to the road to dialogue with the people, challenging them,

being challenged by them, in hearty disputation for which Africans are renowned. Just imagine that during this process, we had the opportunity to hear from all corners of this continent, diverse views about how each of us sees the world, our place in it, what we truly want for Africa, what our dreams as Africans are, our fears, our anxieties, our limitations, even our pain and hope.

Just imagine that at the end of the day, we then collated these expressions, processed them, documented them in beautiful language reflective of our sonorous heritage, and replayed them in all the media for the people to review, absorb, internalise and regurgitate in their own voice and mind frame. The result would be Africa's vision.

This vision would have been created and crafted by Africans. And for that reason, we would have ownership of it. And by owning it, we would be responsible for making it work, because it would be our vision, not the vision of our political leaders only or, for that matter, the vision of their friends and colleagues. The result would be a fundamental principle of good governance, namely, that if you take the people along with you in shaping your agenda, they will share the joy of accomplishment with you. And should things go wrong, they will share the blame with you, because it was their programme, not just yours.

But if you leave the people on the sideline as mere observers, people who merely wave flags along dusty roadsides to welcome our distinguished guests when they should be in school learning or at home reading a book, then when things go wrong, they still blame us, because we kept them out of the process, and now we must find the solution all by our lonely self.

So, the first role of ICTs in the African Development Agenda is to utilise them for engaging the totality of the people in building a common vision for self-development and joint ownership of a common destiny.

In this regard, there is a plethora of innovative applications of existing communications technology to craft custom-tailored use of ICTs at all levels of society, in all communities, with remarkable positive result. We can use IP technology to create inexpensive rural broadcasting. If people talk to each other and understand each other, it becomes more

difficult for them to fight each other, or worse still, for others (often those of us from the cities) to start our quarrels in urban centres, and ask innocent people in the villages to die for us while we and our children head for Europe and America when the seeds of our machinations come to violent fruition.

Our farmers and herdsman have the unique wisdom of history and tradition. They also endure hardships of terrain, weather, inadequate communications and transport resources to improve their productivity and engage in leisure and self-development, which is their legitimate expectation after toiling in the sun to feed us. We can use the facilitation of ICTs to reduce their tedium and physical effort, vastly improve their productivity, find higher income for their products, and enable their wives and children to gain formal education, have access not only to treatment but to preventive medical care, and provide them with the opportunity to both enjoy the cultural products of others, as well as to showcase and share their own creative products clear across the world through Internet and e-Commerce resources and facilities.

### **ICT and Self-Development**

It is commonly agreed that information and communications technologies constitute the basis of the New Economy in which the old assumptions of wealth and poverty, strength and weakness, have been turned upside down. ICTs form versatile tools for transforming economies in leaps and bounds. They provide avenues for innovation and creativity, which result in the development of intellectual property, the most valuable asset in today's economy. The examples of India, China and elsewhere are compelling.

But these benefits accrue only to those who take these tools, master them, and use them to create new or better goods and services. They do not aid development if we merely buy and use them, adding yet another expensive item to Africa's perpetually growing shopping expenditure.

We must use ICT tools to create processes and applications, which both expand our intellectual scope and improve our quality of life, and also enhance our productivity and earning power, thus enabling us to have some time for leisure, rest and reflection. We must use them for innovation, creating new products that bring us much greater value-added returns. ICTs are essentially toys, sometimes expensive toys, which also sometimes have this habit of creating a lot of wealth for those who might not have had the advantage of inheritance wealth.

### ICT and Administration

ICT tools also can save us time and energy if we pass unto them the tedium of routine. If we calculate the energy and time we spend in Africa criss-crossing town or country just to obtain or deliver basic information, or the time we spend just trying to access basic information, we realise that we can pass on such routine to ICT tools. This will free us to do that which we must do, which ICTs cannot do, and which we are most designed to do as human beings, namely, to reflect, make judgement, and manage the complex intangibles of human response to nature that are triggered everyday by our intervention with the dynamics of time in our daily lives.

But in this regard, we must understand the limitations of ICTs. As tools, they do not have a life of their own, and should not be allowed to. Machines must not think for us, for if they do, lacking the complexity of our human mind, they will not be able to make the critical differentiation between data and interpretation, which sometimes makes the difference between life and death. In this regard, the experience of those who have preceded us at the cutting edge of ICT deployment should serve to underscore the pre-eminence of the human mind.

### ICT and Modernisation

In the same line, those of us who have the deficit of inadequate technology must not abandon our historical means of self-development, putting

in abeyance our dreams until ICTs arrive at our doors. Instead, we should seek to enrich these traditional processes, refine and enlarge them, and in the process, see where technology can aid our inherent and indigenous system through greater speed and repetitive capacity. After all, our lives' purpose is not to become what I would like to call "technotrons", or robots, but to use the tools of technology to enrich our human quality.

### **Information versus Knowledge and Wisdom**

ICTs have their downside. They have a remarkable way of undermining our human capacity by misleading us into ceding to them the prime roles of the human species, feeling, thinking and understanding. I have argued in a speech referred to in one of your working papers, that the preponderance of undifferentiated data piled on the platform of our minds has so overwhelmed us that our capacity to think has become inversely proportional to the weight of such data.<sup>3</sup> In other words, the misguided replacement of ICT for our uniquely human process has led to those who have the best of ICT becoming the least capable of reflection and analysis. The consequences of this, in global proportions, are increasingly becoming self-evident. If we in Africa mimic this strategic mistake, which is fast evolving into a fatal flaw that threatens to place all humanity at risk, we stand to lose a lot more, because we would lose our human capacity without even the consolation of having at least once benefited from technology access and capacity.

### **Technological Capacity, Research and Development**

In Africa, we have tried to address the issue of the cost of acquiring the tools and services of ICT. However, we have done so merely on the level of creating shopping lists and finding the money to buy. This is contrary to how others have addressed the challenge. To build its communications

capacity to meet its need, China invested heavily in research and development, and with that in manufacturing. As a result, it was able to roll out more telecommunications lines per year than we have had throughout the continent, and is today, the world leader in the use of mobile telephones. Now Chinese salesmen have joined the long line of American and European ICT merchants who travel all over Africa selling us every tiny bit of ICT tools and equipment.

India is another example. Despite having one of the highest poverty levels in the world, India has become a leading exporter of ICT technology and software.

I have argued that the only way to create affordable ICT access in Africa, and to expand its rollout massively, is to build our own industrial capacity in R&D and manufacturing in Africa.<sup>4</sup> It is quite a simple proposition. We buy the equipment. If we shift these funds to manufacture them, we not only get what we need cheaper, in much greater quantity, and more attuned to our specific needs, we create industries in the process, with jobs, benefit and pride. This should be a major part of our development agenda: To create industrial capacity in ICT (as indeed in other spheres of strategic development) and to push and support our Africans who are fighting to have a niche in this area.

### ICT, Object Materialism and the African Genius

We in Africa must resist the dangerous notion that at the end of the day life is about money. Everyday we see what money cannot buy, and it is frightening. ICT innovation is more genius than money. A year or so ago, a young African man, a young South African, got worried about the traumatic experience of having a mobile phone snatched from people on the street. He was more concerned about the risk of bodily harm than of the material loss of a handset. So he set his mind to find a technological solution. He came up with a way to place photo images and contact information directly on the LCD screens of handsets, in a manner so indelible that you will have to damage the screen to remove the image. Stolen phones have been recovered from this technology.

I lost my personalised handset while flying from New York to Miami. I got a phone call a couple days later from a gentleman saying he found a handset with my photo and contact number on the screen, which he promptly mailed to me. The South African police recognise the immense importance of this invention in their crime reduction efforts. So do law enforcement officials in Africa, Europe, and elsewhere. Telecom Africa Corporation has the pleasure of deploying this African ICT invention, called the Visual Identification Technology (VIT), globally. With your indulgence, I would like to introduce This young African ICT genius, Mr. Edward Modisakgosi, is only one of many African ICT geniuses.

### **Africa's Global ICT Expertise**

ICT is not magic, the appearance of things notwithstanding. African men and women are amongst those who are building ICT technologies for the global companies. We have not tried to know who they are, what they can do, and how to encourage them to do it for Africa. This is partially because we have contracted out the strategic responsibility for such critical capacity building assessment to those who have no particular reason to cede their control of our economy back to African experts.

The time has come for our leaders at all levels to recognise that the responsibility of development includes supporting the right and responsibility of African experts to take the first shot at building this continent. People build capacity by solving their problems at home. If all our problems are contracted out to others to solve, what is left for African experts? We compel them to go abroad and seek employment from the very companies we have enriched and empowered through contracting out our problems to them to solve, thus enabling such companies to profit on African solutions twice removed, from African money through hired African expert labour.

## ICT and the Telecom Africa Corporation

In all of these, some of us have worked hard, and continue to work hard, to create the strategic environment for building Africa's globally competitive capacity in ICT as a means of not only jumpstarting our self-development, but also to have the tools for global competitiveness in a global economy. At Telecom Africa Corporation, we have tried to address some of these issues within the context of Africa's capacity to drive its own ICT development.

### Specialised Governance Networks

In the area of networked administration, Telecom Africa Corporation is in the process of building an Inter-Ministerial Network for the Presidency of Mali. This secure Intranet will link all the 23 government Ministries to the Presidency and the Office of the Prime Minister, providing facilities for Point-to-Multipoint voice, data, Internet, and video-conferencing facilities. At the African Regional Preparatory Conference for next year's World Summit on Information Society, which took place in Bamako last May, we had the pleasure of demonstrating this network.

Upon perfecting this model in Mali, Telecom Africa Corporation plans to offer it to African governments across the continent. We trust that we can count on you to support us, as your own African ICT company. We are all you have, really. And the sooner you empower us as a deliberate strategic policy, the sooner we will be able to enter the global competition to bring back revenue and profits to build Africa. Telecom Africa Corporation is collaborating with Hewlett Packard and Plessey in the Mali project.

### Global Diplomatic Networks

Similarly, we are in the processing of designing a prototype global diplomatic network to link the embassies of an African country to its Foreign Ministry and Government. Again, once we perfect this model, we will offer it across the continent.

## Strategic Networks

We are also working on developing other strategic networks for Africa, which would greatly advance the access to critical information and enhance decision-making processes.

## Software Development: The Digital Factory

ICT networks are driven by software and applications. To promote broad-based African capacity in cutting edge software development, Telecom Africa Corporation has engaged in a project with Sun Microsystems and the Office of the Governor, State of California Technology, Trade & Commerce Agency to build African capacity to develop software for the global market through sub-contracting and outsourcing from major companies around the world. The Digital Factory, as the project is named, will not only become our Bangalore, but will generate taxable hard currency for African countries. Support of such a project by African Governments and their global partners is in our mutual interest.

## Manufacturing

Telecom Africa Corporation has been collaborating with a major Chinese firm to manufacture optical fibre transmission equipment and cables in Africa. When built, such a venture will drastically reduce the cost of telecommunications infrastructure, enabling us to accelerate the rollout of infrastructure and to replace those that have become obsolete or inadequate.

## **The Telecom Africa Virtual Research Laboratory**

Technology is not viable without research and development. The perception that R&D is esoteric for Africa is patently disingenuous. Promoting Research and Development is an investment in creating vastly

multiplied revenue levels while enhancing scientific capacity in Africa. What is quite disturbing in this regard is that African governments have made no effort to make building research and development facilities in Africa a condition for major contract opportunities. This is how the Chinese got their research and development, as well as manufacturing investments. Strategic policy on the part of African governments is critical in compelling commitments in this area. Many companies operating in ICT in Africa have built impressive research laboratories in Asia. The fact is not that the African market cannot sustain similar investments, but that it is clear to these companies that African governments will not demand it. You only get what you ask for!

In this regard, we are working on building a Telecom Africa Virtual Research Laboratory, which will enable African scientists worldwide and others so disposed to undertake research and development work online in a secure Intranet. When such research gets to the advanced stage where it requires in-laboratory experimentation, it will then be taken offline and brought indoors, so to speak.

### **Revisiting NEPAD and Making it Work**

At the outset, I sought to discuss flaws in NEPAD with a view to showing how the process we take to vision-building can help or hurt popular buy-in and ownership of common goals. I did that because NEPAD is the only African game in town. As such, it must succeed. This can only happen if all of us take ownership of it, and with passion and enthusiasm, reconstitute it to fit Africa's own priorities and vision. Then we can give it all we have to make it work. For this to happen, those who manage it must acknowledge through proclamation and action, the recognition of the strategic position that building Africa's future is not only the responsibility of Africans, but also their right. It is in solving Africa's problems that we build the capacity, which we later

can deploy elsewhere to create wealth for the continent and ourselves. We are up to the challenge and indeed have no choice, because who else will develop this continent, except ourselves?

### **Africa's Place in the World**

We tend to be enamoured of our struggle to acquire attributes others require of us as essential to our right of passage to global citizenship. In the process, we suspend our own dreams about the world we need to build for ourselves so that we can live, learn, love and dream, grow and create, in an environment of peace, confidence, trust, and a profound sense that the world belongs to us no less than it belongs to others. We must insist that we too do have an idea as to what will make this world a better place, and that when we have built our own world on the basis of our own aspirations, not the expectations of others, we will turn to the world at large and make our indelible imprint on it. That imprint will be informed and enriched by a culture, which no body has had the courage or the disingenuity to question as less than one of the marvels of the history of human existence and expression.

It will be informed, also, by the eminent truth that as the children of one of the oldest civilizations of mankind, Africans embody a unique history of coping with intangible challenges of human existence, a capacity our world could gain a lot from as we ponder what the world has come to.

### **Africa's Right and Responsibility to Help Shape our Common World**

And there are sound reasons for insisting on the right of our view of our world and the reluctance to seek to secure what we are not. If we learn

anything from the events of the last year and more, as we beat the drums of war so soon after the celebration of the end of the twentieth century and hailed the promise of a new Millennium, it is that no one has the answers to what is right for the world. This is heartening, in some way, in that it compels us to re-examine the devastating castigation of us as ne'er-do-wells. We must dump our pessimism and strike out to build a better world for all of us, knowing that we too do know much and have much to contribute. Our guess is as good as anyone else's.

### **Equanimity and the Right and Responsibility of Nation-Building**

That being the case, we should relax, take a deep breath and embark on building our dream Africa which only we can mastermind. Then, and only then, after we have determined where we really want to go, can those who are our friends figure out how to help us. That is the legitimate framework for development assistance, and indeed, of friendship. We each run our lives, and help each other to make it better for each other and for all of us together. We do not cede our right and responsibility to shape our future, our destiny and therefore our legacy to others, friend or foe, in the mistaken idea that they can or will develop us while we sleep through time and history.

We cannot deprive our people of the right, responsibility and opportunity to build this African continent by negotiating away the opportunities inherent in solving our problems on the spurious and grossly erroneous idea that others possess capacities we do not have, even financial, when we have not tried to know what expertise and resources Africans do truly possess, at home and throughout the Diaspora, and how we can partner with our own people to build our common future.

## **Meeting the Challenge of Our Tomorrow**

Where do we go from here? That is the common challenge we must jointly address. We must ask those whom we have chosen to guide our political and administrative development to find the courage to believe in our ability to build this continent. It is a plea for reciprocal confidence. We have shown our confidence in their ability to govern and lead. We come from the same stock as they do. If they can lead our political destiny, surely they must admit that those of us who are as competent and as trained as any of our counterparts anywhere in the world, can also lead our economic, scientific and social development.

This way, when we take ownership of our development problems and strike out to find their solutions, we shall have begun Africa's March of Progress with excellent prospects of success and sustained will and enthusiasm. Then we will enjoy the profound joy of the accomplishment of building our own lives and our future. We, each of us, can one day take our children and grandchildren down the road, into our industries, markets and institutions, into museums, libraries and archives, and show them what little part of this great continent's heritage each of us helped to build.

Above all, I have allowed myself the privilege of candour only because I believe that it is something we must do now. I do not for a moment wish to leave the impression that all is bad. On the contrary, I am bullish about this beautiful continent and its gifted people. But I am impatient about the way we have delayed getting this train out of the station.

Nor do I mean to suggest that we do not need our friends. On the contrary, as Africans, we honour and treasure friendship. I simply mean to say that owning our future is a fundamental right and responsibility which we cannot cede, not after all that this continent has gone through. I am sure deep down, our true friends do understand, for which I thank you.

## NOTES

1. A keynote address to the CAFRAD Regional Workshop on Building e-Governance Capacity in African Countries, held in Johannesburg, South Africa, 28–31 October, 2002. The Workshop was sponsored by the African Training and Research Centre in Administration for Development (CAFRAD), the United Nations Department of Economic and Social Affairs—Division for Public Economics and Public Administration (UNDESA/DPEPA), and the Ministry for Public Service and Administration of the Government of South Africa, under the auspices of NEPAD.
2. See Joseph O. Okpaku, Sr., *Ownership of Problems, Intellectual Property and the Digital Divide—The Enabling Challenge of Solutions*, An address to the World Intellectual Property Organisation (WIPO) Second International Conference on Electronic Commerce and Intellectual Property, Geneva, September 19–21, 2001.
3. Joseph O. Okpaku, Sr., *E-Culture, Human Culture and In-Between: Meeting the Challenges of the 21st Century Digital World*, ITU Conference on Creating New Leaders for e-Culture Conference, Coventry, United Kingdom, August 20–24, 2001.
4. Joseph O. Okpaku, Sr., *Telecom Africa: Building Africa's Global Competitiveness In The 21st Century*, A keynote address to the Africa TELECOM '98 Strategic Summit, Johannesburg, May 8, 1998.